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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Scott J. Tuman

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EXAMINER

LIGHTFOOT, ELENA TSOY

ART UNIT

PAPER NUMBER

1792

NOTIFICATION DATE

DELIVERY MODE

10/01/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 09/822,651	<b>Applicant(s)</b> TUMAN ET AL.	
	<b>Examiner</b> Elena Tsoy Lightfoot	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 113-154 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 113-154 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 27, 2009 has been entered.

***Response to Amendment***

Amendment filed on August 27, 2009 has been entered. Claims 1-112 have been cancelled. New claims 116-154 have been added. Claims 113-154 are pending in the application.

Claims examined on the merits are 113-154.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 140-148 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation “the second major side of the fibrous web is ***at least partially exposed***” means that “the polymer forming the polymeric regions does not extend *through* the substrate” (independent claims 113-115) wherein the substrate is a **fibrous non-woven** web (Claim 140), was not described in the specification in such a way as to reasonably convey to one skilled in the

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relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Applicants' specification discloses that the source 53 deposits the **melted** polymeric material on the web 50 as discrete portions 55; the portions 55 are simultaneously *pressed* into the cavities and fused to the web 50, and a casting roll 58 provides **pressure** against the back side of the web 50 as the polymeric material cools, thereby assisting in pressing the polymeric material into the cavities in tooled surface 57 of tool roll 56 and fusing of the polymeric material to the web 50 (See Fig. 5 and page 8, lines 4-7). However, the Applicants' specification discloses *nowhere* that the melted polymer does not go *through* the **fibrous** material under the **pressure** of roll 58 against the roll 57 such that the second major side of the fibrous web is partially or fully exposed.

#### **Applicants' arguments**

Applicants argue that with regard to written description support for and enablement of the limitation "wherein the second major side of the substrate is at least partially exposed, and wherein any of the polymer forming the discrete patch that may be present on the second major side is provided by the polymer extending from the first major side through the fibrous nonwoven web to the second major side", one skilled in the art would understand that when a polymeric material is deposited on only the first side of a substrate as described in the present specification (e.g., page 6, lines 14-26), whether the polymeric material would be present on the second major side of the substrate depends on the properties of the substrate such as porosity and thickness, even if the substrate is fibrous. Evidence for this position is provided by U.S. Pat. No. 5,669,120 (Wessels et al.), which states in col. 2, line 16, "a pile supporting portion, i.e. the core sheet, needs such a high density not to allow molten resin to pass through". Thus, a person of ordinary skill in the art, armed with the knowledge gained from Applicants' specification and information known in the art, could make and use the web construction even when the polymer forming the polymeric regions does not extend through the substrate to form part of the second side. Also, a person of ordinary skill in the art would understand that Applicants had possession of the claimed invention, as evidenced by Applicants' specification and information known in the art.

The argument is unconvincing because the specification as originally filed does not describe high density that does not allow the molten polymer to go *through* the **fibrous** material under the **pressure** of roll 58 against the roll 57 such that the second major side of the fibrous web is fully exposed.

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3. Claims 140-148 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the *enablement* requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The limitation “the second major side of the fibrous web is *at least partially exposed*” means that “the polymer forming the polymeric regions does not extend *through* the substrate”, wherein the substrate is a **fibrous non-woven fibrous** material, was not described in the specification in such a way as to enable one skilled in the art to prevent the melted polymer to go *through* the **fibrous** material, the **woven** web or the **knit** web under the *pressure* of roll 58 against the roll 57 such that the second major side of the fibrous web is fully exposed.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 149-150, 152 are rejected under 35 U.S.C. 102(b) as anticipated by Wessels et al (US 5,669,120).

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Wessels et al discloses a web construction comprising a continuous *fiber* sheet S of **thermoplastic** resin (See column 6, lines 40-41) containing a plurality of discrete polymeric regions having loop regions S2 and a plurality of hook elements 4b fused to one (first) side of the resin sheet (See Figs. 4A, 4F).

7. Claims 151 and 154 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et al '120.

As to claim 151, Wessels et al teaches that conventional art uses hook- or mushroom-shape engaging elements with loop elements (See column 1, lines 18-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used mushroom-shape engaging elements in Wessels et al since it is well known in the art to use hook- or mushroom-shape engaging elements with loop elements. It is held that the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). See MPEP 2144.07.

As to claim 154, Wessels et al teaches that since the pile core sheet is manufactured by weaving or knitting, it is possible to change the design of the pile core sheet in arrangement and orientation of piles and to determine *the size, shape or arrangement of hook elements* optionally. It is accordingly possible to cope instantly with various requirements for the surface fastener in which hook and loop elements coexist. (See column 10, lines 54-60). Therefore, although Wessels et al does not explicitly disclose claimed design, it would be within the level of ordinary engineering skill to make hooks of any design depending on particular use of a final product. Moreover, it is held that a shape is an obvious choice of design.

**Applicants arguments:**

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Applicants argue that a discrete patch of polymer having a perimeter that is entirely bordered by the first major side of the fibrous web would not be an obvious design choice over Wessels et al.

However, the Board affirmed the Examiner's position about an obvious choice of design over Wessels et al by the Decision rendered on 2/24/2006.

8. Claim 153 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et al '120, as applied above, and further in view of McCormack et al (US 6589638).

Wessels et al fails to teach that that the thermoplastic is microporous.

McCormack et al teaches that for applications where the loop component also serves as the backing material, it is highly desirable that it can be *breathable* (claimed microporous film) for comfort and also that it serve as a barrier to prevent leakage (See column 1, lines 27-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made a breathable fastener in Wessels et al with the expectation of providing the desired comfort and a barrier to leakage, as taught by McCormack et al.

9. Claims 113, 116-120, and 122-125 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wessels et al (US 5,669,120).

Wessels et al is applied here for the same reasons as set forth in paragraph 8 of the Office Action mailed on 5/27/2009 because they recite limitations of cancelled claims 71-79, 81-83, 85-90, 92-108, and 112.

As to patches entirely bordered by the first major side of the substrate, note that hook regions having hook elements 4b extending from the substrate 4a/S, as shown in Fig. 4, is entirely bordered by the first major side of the substrate, as required by claimed invention. If Applicants argue that the hook regions having hook elements 4b are not entirely bordered by the first major side of the substrate, it is the Examiner's position that it would be within the level of

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ordinary engineering skill to make hooks of any design depending on particular use of a final product since it is held that a shape is an obvious choice of design.

Moreover, Wessels et al teaches that since the pile core sheet is manufactured by weaving or knitting, it is possible to change the design of the pile core sheet in arrangement and orientation of piles and to determine *the size, shape or arrangement of hook elements* optionally. It is accordingly possible to cope instantly with various requirements for the surface fastener in which hook and loop elements coexist. (See column 10, lines 54-60). Therefore, although Wessels et al does not explicitly disclose claimed design, it would be within the level of ordinary engineering skill to make hooks of any design depending on particular use of a final product.

As to unexposed regions of a fibrous web, Wessels et al teaches a fibrous web of thermoplastic resin (See column 6, lines 40-41) that is *partially exposed* (See Fig. 4A).

10. Claims 113, 116-120, and 122-125 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et al '120, as applied above, further in view of Allen et al (US 5,547,531) for the reasons of record set forth in paragraph 9 of the Office Action mailed on 5/27/2009 because they recite limitations of cancelled claims 78, 83, 85-90, 92, 93, 95, 96, 101.

11. Claims 113, 116-120, and 122-125 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et al '120 in view of Allen et al '531, as applied above, and further in view of Provost et al (US 5606781) for the reasons of record set forth in paragraph 10 of the Office Action mailed on 5/27/2009 because they recite limitations of cancelled claims 78, 83, 85-90, 92, 93, 95, 96, 101.

12. Claims 114-115, 121, and 126-139 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et al '120 or over Wessels et al '120 in view of Allen et al '531 or



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over Wessels et al '120 in view of Allen et al '531 and Provost et al '781, as applied above, further in view of Long et al (US 5624429).

Wessels et al teaches a pile woven or knit core sheet as a loop material (See column 6, lines 12-14). Wessels et al fails to teach that *fibrous nonwoven* can be used as a loop material.

However, Long et al teaches that a loop material can be provided by a nonwoven, woven or knit fabric (See column 20, lines 12-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used nonwoven fabric as a loop material in Wessels et al instead of woven or knit fabric since Long et al teaches that a loop material can be provided by a nonwoven, woven or knit fabric.

Moreover, it is held that the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). See MPEP 2144.07.

As to claim 115, Wessels et al teaches that since the pile core sheet is manufactured by weaving or knitting, it is possible to ***change the design*** of the pile core sheet in arrangement and orientation of piles and to determine ***the size, shape or arrangement of hook elements*** optionally. It is accordingly possible to cope instantly with various requirements for the surface fastener in which hook and loop elements coexist. (See column 10, lines 54-60).

Wessels et al does not explicitly disclose *circular* shaped fasteners. However, it was well known in the art to use *circular* shaped fasteners before the Applicants invention\*. Therefore, although Wessels et al does not explicitly disclose claimed design, it would be within the level of ordinary engineering skill to make hooks of any design including circular shaped patches

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depending on particular use of a final product since it is held that a shape is an obvious choice of design.

It is the Examiner's position that it would be within the level of ordinary engineering skill to make circular shaped hooks.

13. Claim 115 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wessels et al '120 or over Wessels et al '120 in view of Allen et al '531 or over Wessels et al '120 in view of Allen et al '531 and Provost et al '781, further in view of Long et al, as applied above, and further in view of Shoemaker (US 4903874)\*.

Wessels et al does not explicitly disclose *circular* shaped fasteners. However, Shoemaker teaches that mating **circular** VELCRO hook and loop pads may be used as fasteners (See column 4, lines 5-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made regions S1 and hook regions in Wessels et al of a *circular* shape since Shoemaker teaches that mating **circular** hook and loop pads may be used as fasteners, and Wessels et al does not limit its teaching to particular shapes.

### ***Response to Arguments***

Applicants' arguments filed August 27, 2009 have been fully considered but they are not persuasive.

Applicants argue that none of the cited references, alone or in combination, teaches or suggests a mechanical fastener or a web construction having a fibrous web (claim 113, 116-125) or fibrous nonwoven web (claims 114, 115, and 126-139) and a discrete patch of polymer having a perimeter that is entirely bordered by the first major side of the fibrous web or fibrous nonwoven web, further wherein the second major side of the fibrous web or fibrous nonwoven web is partially exposed as claimed in claims 113 to 125.

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The Examiner respectfully disagrees with this argument.

As to a discrete patch of polymer having a perimeter that is entirely bordered by the first major side of the fibrous web, note that Board affirmed the Examiner's position about an obvious choice of design in the Decision rendered on 2/24/2006.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy Lightfoot whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Friday, 9:00AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy Lightfoot, Ph.D.  
Primary Examiner  
Art Unit 1792

September 29, 2009

/Elena Tsoy Lightfoot/